

## E. TRANSITIONING N1-1 TO SECONDARY FROM PRIMARY & N1-2 TO PRIMARY FROM STANDBY

### 1. VERIFY MDM STATES AND MDM IDs

PCS1

Node 1: C&DH: MDM N1-1

PRIMARY NCS MDM Node 1

√STATE - Primary

√MDM ID - N1-1

PCS1

Node 1: C&DH: MDM N1-2

SECONDARY NCS MDM Node 1

√STATE - Standby

√MDM ID - N1-2

#### NOTE

If states are not correct, do not execute this procedure.

√**MCC**

### 2. COMMAND N1-1 TO SECONDARY (N1-2 SHOULD GO TO PRIMARY)

PCS1

Node 1: C&DH: MDM N1-1

PRIMARY NCS MDM Node 1

#### NOTE

1. Sending the following command will cause the loss of PCS1, Early COMM, and OIU telemetry until OIU reconfiguration and PCS2 reconnection are done.

2. Possible PDI DECOM fail message.

'MDM Major State:'

sel Commands

**cmd N1-1\_MDM\_Xsitn\_Second\_State Execute**

√Frame Count - static (Loss of PCS1 telemetry)

N1-2 should go to Primary in 20 seconds.

### 3. TELEMETRY RECOVERY ON PCS2

PCS2

After boot up, when taskbar appears at bottom of display

sel Arrow directly above 'PCS' logo

sel Start/Restart PCS CDS

sel Icon to open PCS CDS Main Control Panel Window

√Status Box is green and 'Connected' is displayed in the PCSCDS Main Control Panel Window

NOTE

PCS2 connection to MDM is indicated by green in the Status Box and/or 'Connected' message displayed in the PCS2 CDS Main Control.

```
*****
*   If Status Box is not green, select 'Connect to MDM' icon   *
*   to reconnect.                                              *
*   If still no joy, close all displays and all iconified items *
*   repeat this step.                                          *
*   √MCC if Status Box is still not green.                    *
*****
```

PCS2 4. VERIFY N1-2 IS PRIMARY AND N1-1 IS SECONDARY  
Node 1: C&DH: MDM N1-2  

PRIMARY NCS MDM Node 1

√Frame Count - incrementing

'MDM Major State:'

√STATE - Primary

√MDM ID - N1-2

PCS2 Node 1: C&DH: MDM N1-1  

SECONDARY NCS MDM Node 1

√Frame Count - incrementing

'MDM Major State:'

√STATE - Secondary

√MDM ID - N1-1

```
*****
*   If States are not correct or no N1-2 TLM   *
*   *                                           *
*   √MCC                                       *
*****
```

PCS2 1. Verify MDM Heater and Shell Heater Configuration  
Node 1: C&DH: MDM N1-2  

PRIMARY NCS MDM Node 1

  
'RPCM N1RS2 C'

sel RPC 3  
sel Commands  
√Position - CI

'N1-2 Operational'

√MDM N1-2 Op Htr Availbty - Ena Ops  
√MDM N1-2 Op Htr Health Stat - Operational

'N1-1 Survival'

√MDM N1-1 Surv Htr Availbty - Ena Ops  
√MDM N1-1 Surv Htr Health Stat - Operational

√**MCC** for PMA 1 and Node 1 Shell Heater configuration

#### 5. TELEMETRY RECOVERY ON EARLY COMM (GROUND ONLY)

NOTE

Early COMM should reconnect to N1-2 MDM on the other Orb bus automatically in about 10 seconds after N1-2 MDM becomes Primary.

Node 1: C&DH: MDM N1-2

PRIMARY NCS MDM Node 1

√Frame Count - incrementing

'MDM Major State:'

√MDM ID - N1-2

√MDM State - Primary

\*\*\*\*\*  
\* If Frame Count is Static after 20 seconds from the moment \*  
\* N1-2 becomes Primary (no Early COMM telemetry received) \*  
\* \*  
\* √**MCC** \*  
\*\*\*\*\*

#### 6. TELEMETRY RECOVERY ON OIU

NOTE

Possible PDI DECOM fail message.

CRT

SM 212 OIU

BUS 3 BC - ITEM 11 EXEC

BUS 4 RT - ITEM 14 EXEC

Change OIU N1 Physical Device to N1-2 - ITEM 18 +3 EXEC

CRT            Reload OIU FORMAT 2 - ITEM 1 +2 EXEC

CRT            SM 210 NODE

√PHY ID PRI MDM - N1-2

√STATE            - PRI

√FAIL             - blank

√FRM CTR         - incrementing